

# PSJ3

## Exhibit 598

Message

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**From:** Bratton, Edward [edward.bratton@walgreens.com]  
**Sent:** 5/23/2016 2:08:19 PM  
**To:** Polster, Natasha [tasha.polster@walgreens.com]  
**Subject:** State of Integrity  
**Attachments:** State of RxIntegrityv10.pptx

I wasn't able to find a copy of the amphetamine recommendations from the DEA related to slide 5. Do you want me to remove the recommendations around field action on this item?

**Edward Bratton**

Manager - Pharmaceutical Integrity

Walgreen Co. | 200 Wilmot Road Deerfield, IL 60015

Telephone 847 315 2689 | **REDACTED**

**Member of Walgreens Boots Alliance**

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# State of Rx Integrity

5/10/2016

# Control Drug Trends

Trending of controlled substance reporting.

# Growth of selected control drug families

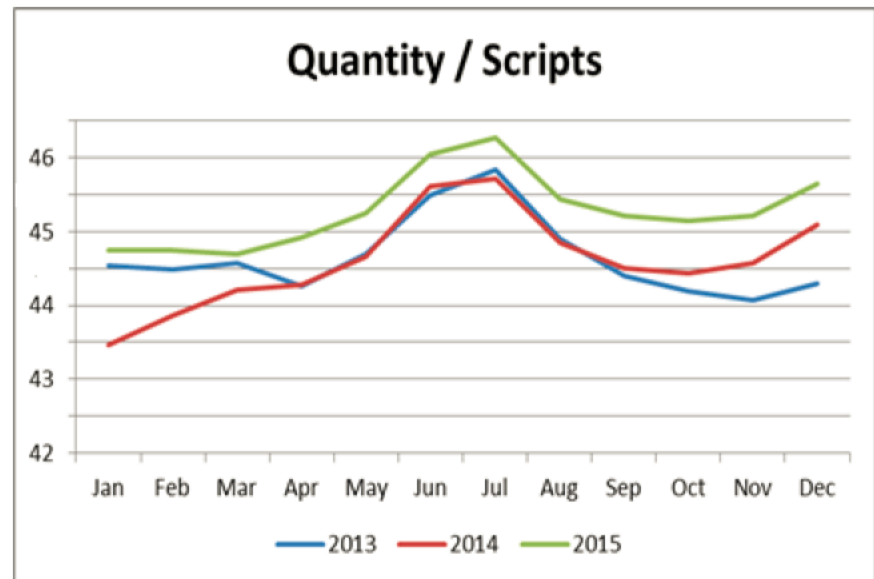
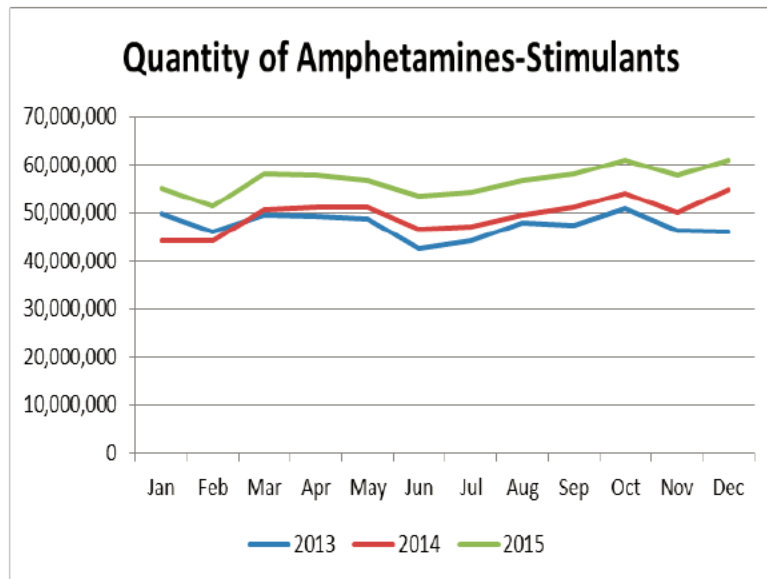
Most recent snap-shot of controlled substance trends.

Product Family	Q2 2015 QTY	Q2 2016 QTY	% Change
AMPHETAMINES-STIM	466,842,928	523,516,752	12%
OXYCODONE	577,610,277	631,858,227	9%
BUPRENORPHINE	40,451,953	44,086,817	9%
PROMETHAZINE W/CODEINE	122,769,595	131,358,543	7%
HYDROMORPHONE	31,391,032	32,761,116	4%
ALPRAZOLAM	377,838,478	383,027,411	1%
TRAMADOL	408,354,357	402,178,468	-2%
HYDROCODONE	1,058,225,145	1,021,941,342	-3%
METHADONE	47,411,169	44,244,257	-7%
CARISOPRODOL	61,727,627	54,632,638	-11%
PROMETHAZINE VC W/CODEINE	9,253,139	5,906,137	-36%

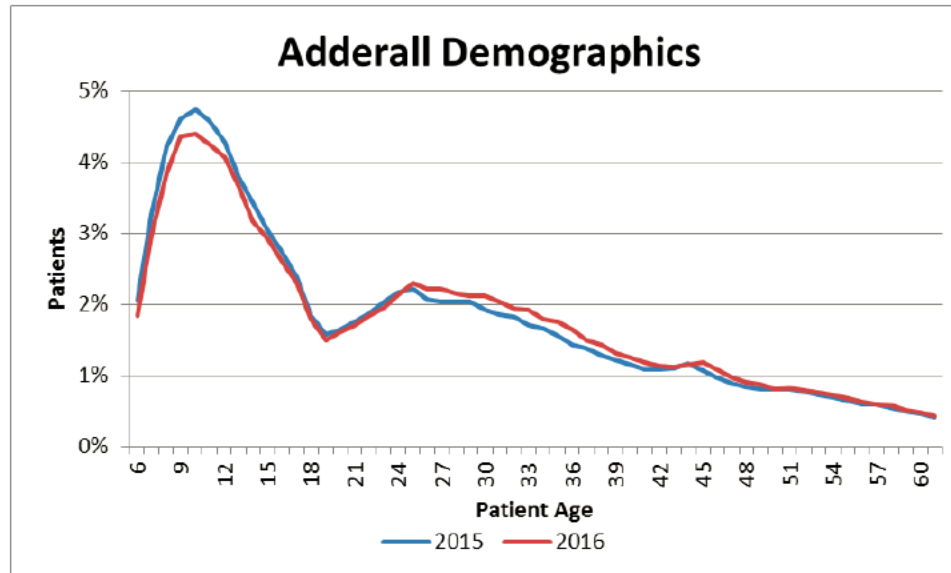


# Amphetamine Stimulants

- Chain wide year over year 2014 through 2015, the quantity of Amphetamines-Stimulants dispensed has **increased** by an average of 12%.
- For 2014 vs 2015, the average quantity per Rx has **increased** by 1.96%.



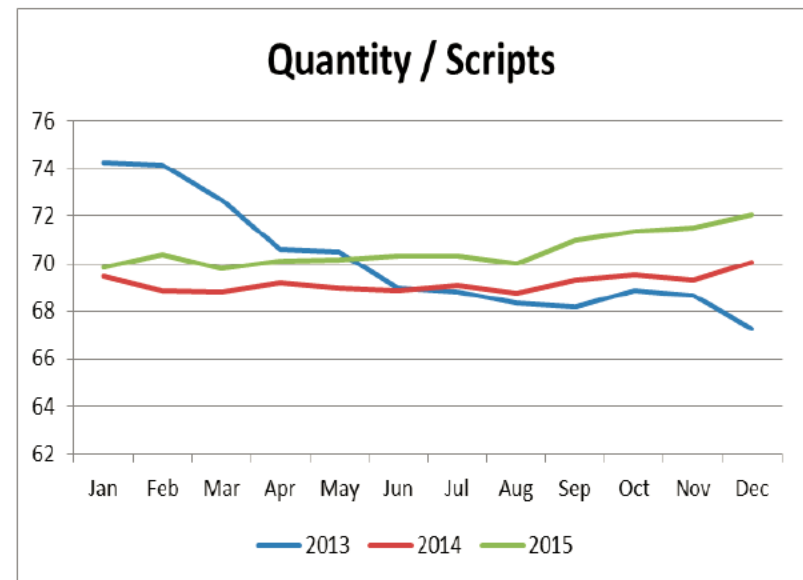
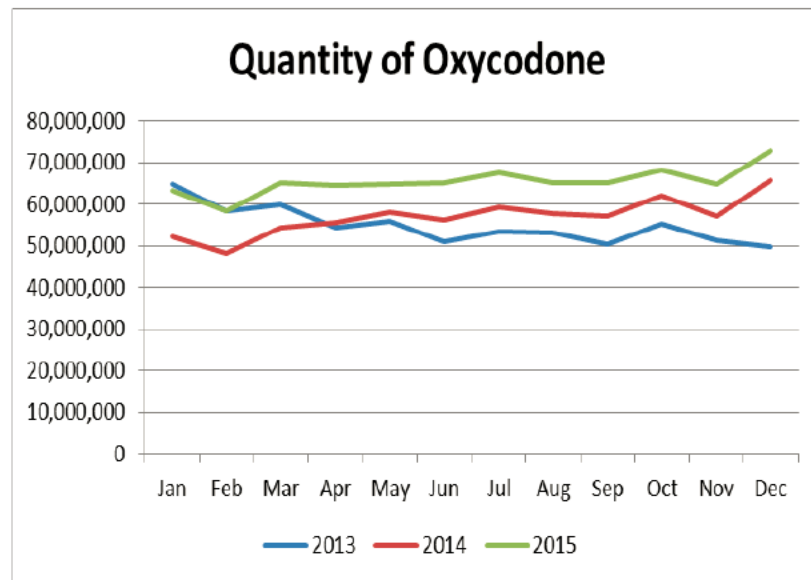
# Amphetamine Stimulants - Demographics



- The number of patients taking Amphetamine Stimulants under the age of 30 has increased by 7% and over 30 has increased by 20%.
- The increase under 30 largely matches the growth of patients in that age group, however the over 30 group has had a 20% increase in patients on stimulants but only a 6.9% increase in the number of patients over 30.
- The over 30 increase is larger than expected and might warrant additional attention at the store level to ensure abuse / diversion is not occurring.

# Oxycodone

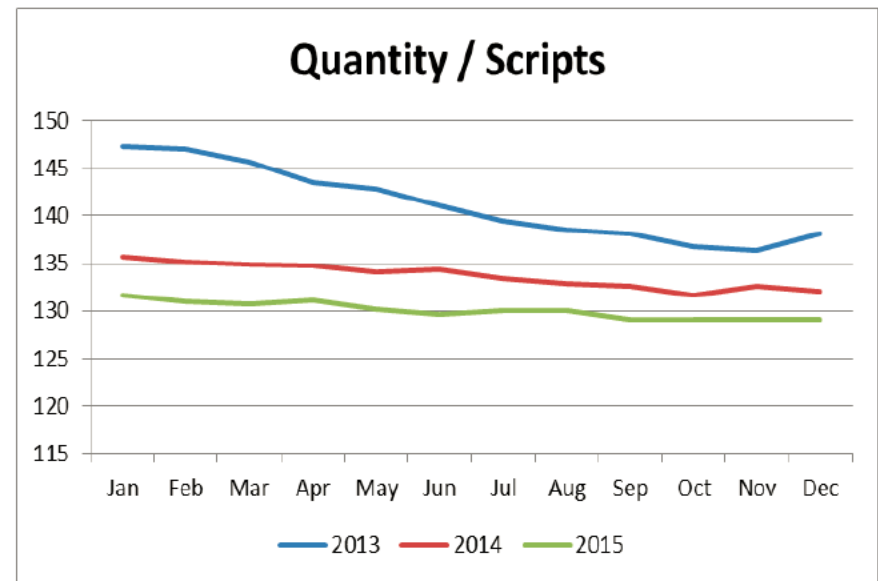
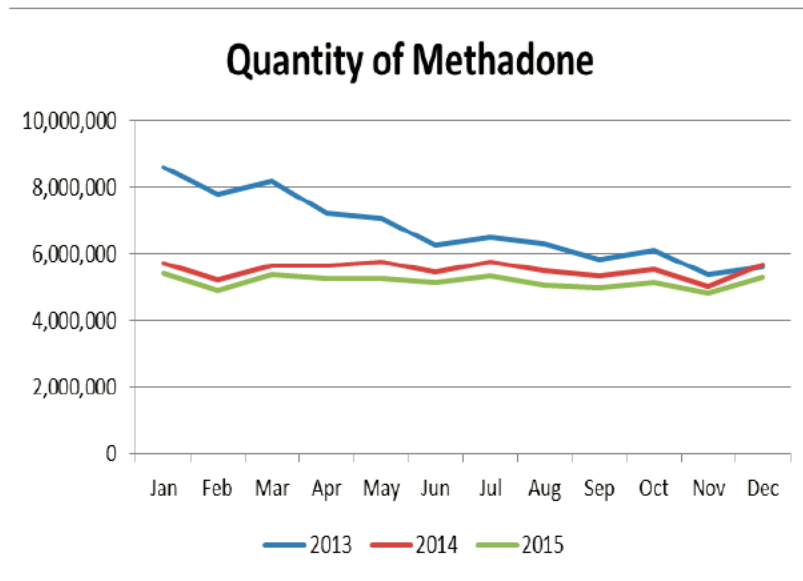
- Chain wide year over year 2014 through 2015, the quantity of Oxycodone dispensed has **increased** by an average of 9 %.
- For 2013 vs 2014, the average quantity per Rx has **increased** by 1.34%.
- For 2014 vs 2015, the average quantity per Rx has **increased** by 1.96%.





# Methadone

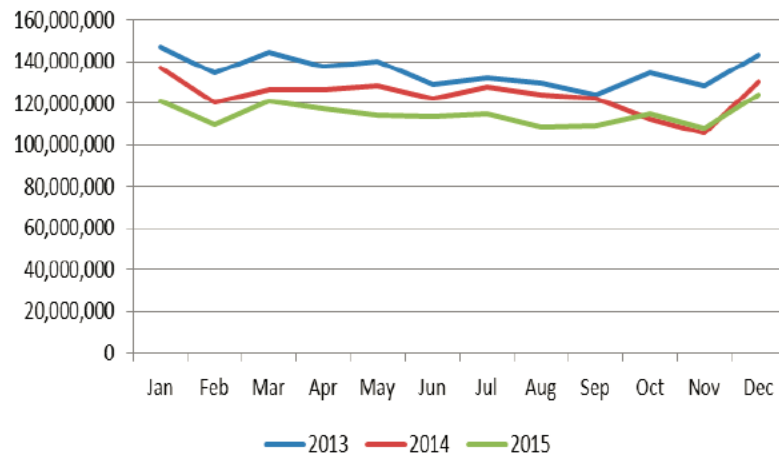
- Chain wide year over year 2014 through 2015, the quantity sold and number of scripts of Methadone has **decreased** by an average of 4.21%
- For 2013 vs 2014, the average quantity per Rx has **decreased** by 5.64%
- For 2014 vs 2015, the average quantity per Rx has **decreased** by 2.79%



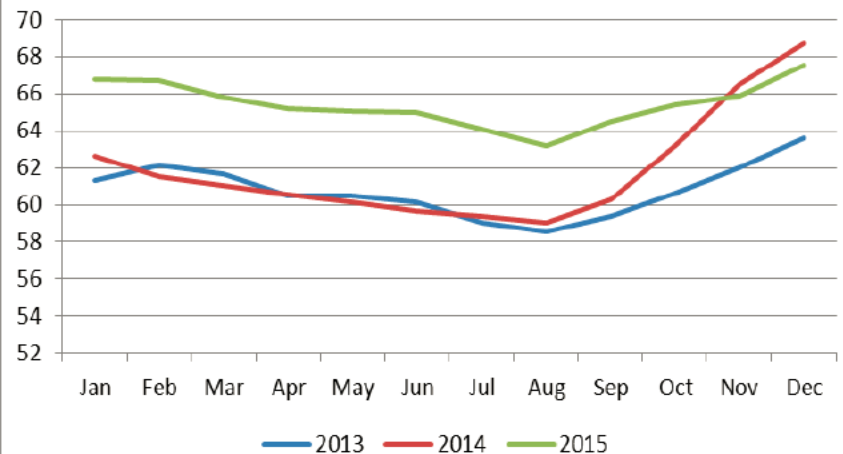
# Hydrocodone

- Chain wide year over year 2014 through 2015, the quantity sold of Hydrocodone has **decreased** by an average of 4%
- For 2013 vs 2014, the average quantity per Rx has **increased** by 1.66%
- For 2014 vs 2015, the average quantity per Rx has **increased** by 5.43%

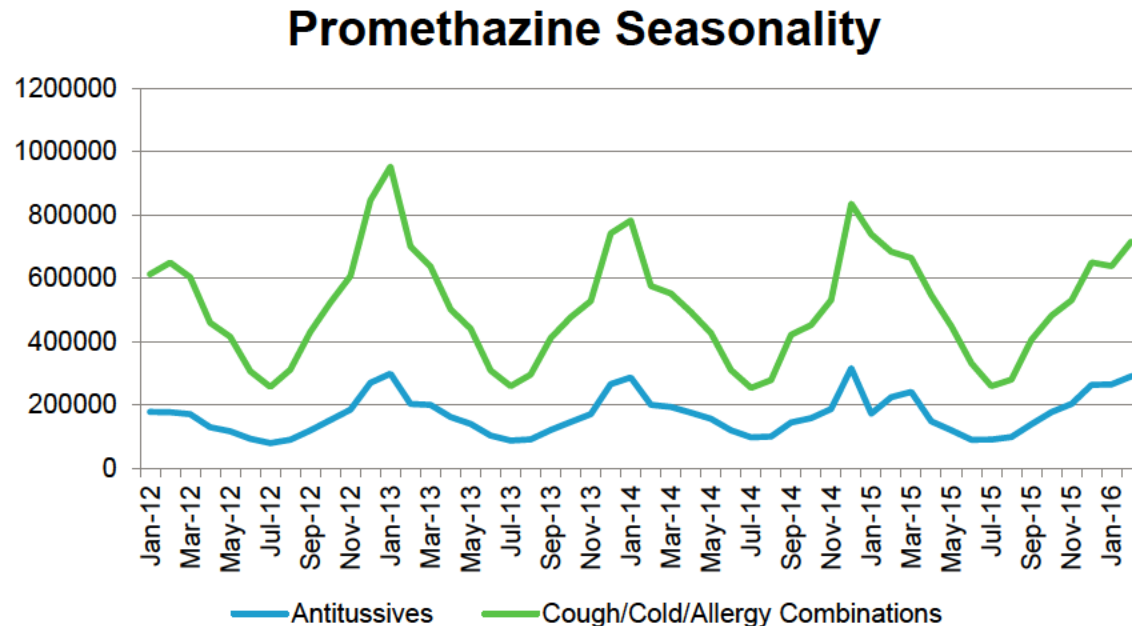
Quantity of Hydrocodone



Quantity / Scripts



# Promethazine with Codeine



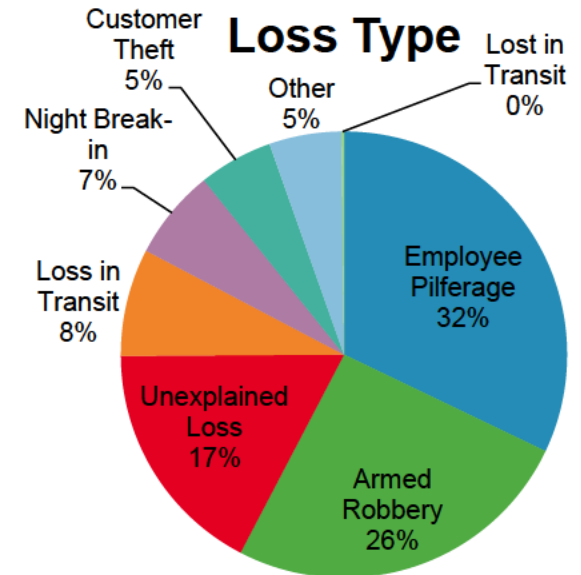
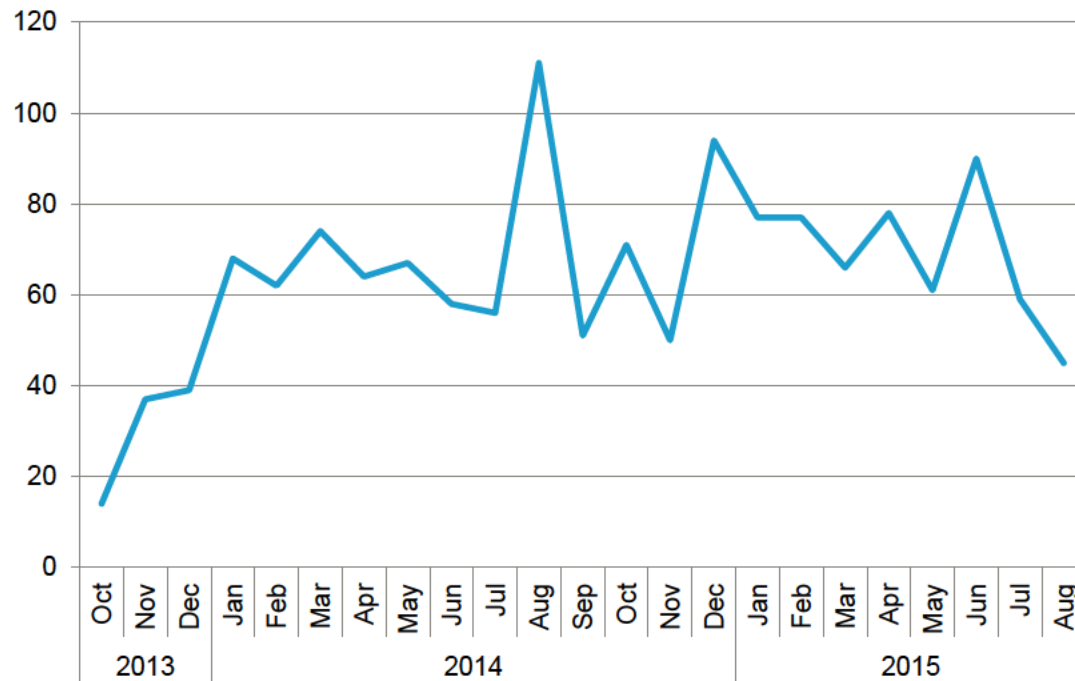
**Promethazine increases follow a seasonal trend and return to pre-seasonal baseline. We believe this indicates normal seasonal usage and does not represent a greater diversion risk. Additionally some of the increase in promethazine with codeine is offsetting the reduction in promethazine with codeine VC (which dropped 4M milliliters YoY)**



# DEA 106 Reporting

Controlled drugs lost or stolen which are reported to the DEA

# DEA 106 Submitted Forms



Losses have increased 16% from FY14 to FY15.

FY15 had 833 losses with total quantities of product lost over 1.9 million dosage units.

Average number of losses per month is ~70, with employee pilferage is the top loss root cause making up 32% of losses.

Dates Inclusive FY14-15 (9/1/2013-8/31/2015)



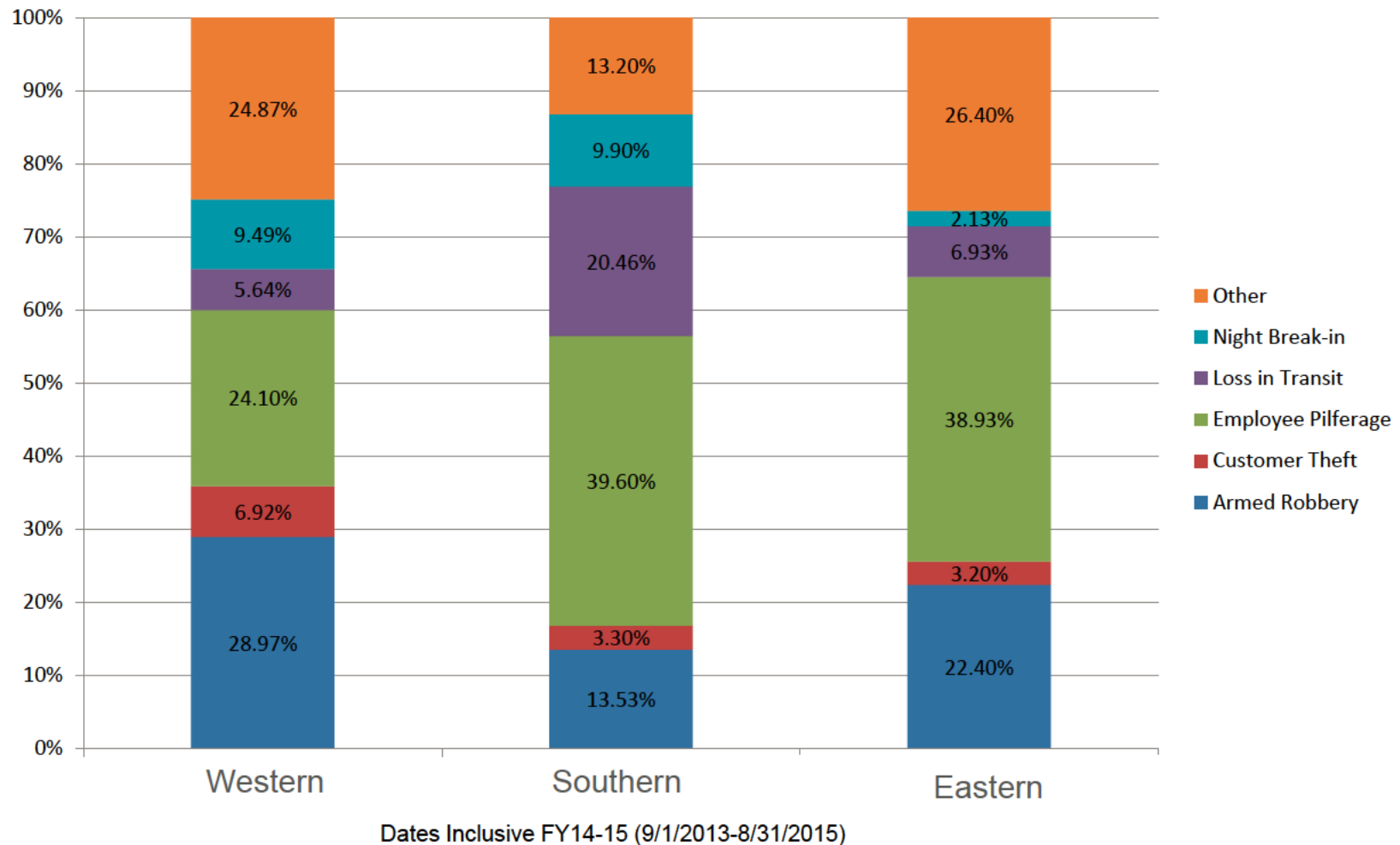
# DEA 106 Losses by State

Top 10 States for each category.

Employee Pilferage			Armed Robberies			Customer Theft		
State	Quantity of Losses	Incidents	State	Quantity of Losses	Incidents	State	Quantity of Losses	Incidents
CA	99726	32	CA	172623	58	CA	15213	12
IL	129373	31	IN	58378	50	IL	12617	9
TN	73280	27	TN	29580	14	FL	8039	5
FL	34556	25	WI	30691	11	TX	2359	5
TX	76431	17	NC	7654	10	WA	4124	4
NY	33254	11	WA	16635	8	MO	3238	3
MA	9729	11	MA	18246	7	LA	59	2
MI	42074	11	TX	49666	7	MD	2617	2
OH	22409	9	MN	14307	7	NY	2581	2
NC	27623	8	MO	9619	7	GA	2722	2
Night Break-In			Other			Loss in Transit		
State	Quantity of Losses	Incidents	State	Quantity of Losses	Incidents	State	Quantity of Losses	Incidents
FL	76415	20	NH	4965	19	FL	5951	8
WA	87834	11	CA	12900	15	NJ	4886	6
AR	80535	6	MN	1015	12	NY	3870	6
MD	59740	6	MA	787	9	TN	6884	5
OH	11353	3	AZ	8312	9	NV	536	4
OR	22574	3	FL	1823	6	CT	550	4
CA	12877	3	NY	4594	6	LA	1300	3
GA	6083	2	SC	467	5	AZ	361	2
TN	15880	2	MO	48518	5	CA	600	2
UT	1604	1	NC	2435	5	TX	533	2



# Loss Distribution by Operation



# DEA 106 – Top Drugs Lost

Drug Name	# of Losses
HYDROCODONE/ACETAMINOPHEN 10-325	509
HYDROCODONE/ACETAMINOPHEN 7.5-325	277
HYDROCODONE/ACETAMINOPHEN 5-325	245
OXYCODONE 15MG* IMMEDIATE REL	238
OXYCODONE/ACETAMINOPHEN 10-325MG	228
ALPRAZOLAM 2MG TABLETS	216
OXYCODONE/ACETAMINOPHEN 5-325MG TAB	189
OXYCODONE 5MG IMMEDIATE REL TABS	185
OXYCODONE 30MG IMMEDIATE REL TABS	178
OXYCODONE 10MG IMMEDIATE REL TABS	158

Top 5 drugs make up 20% of all losses reported.

Note: Each incident may have multiple products which are lost, stolen or pilfered.

Employee Pilferage	
HYDROCODONE/ACETAMINOPHEN 10-325 T	340
HYDROCODONE/ACETAMINOPHEN 7.5-325 T	175
HYDROCODONE/ACETAMINOPHEN 5-325 TB	145
ALPRAZOLAM 2MG TABLETS	145
ALPRAZOLAM 1MG TABLETS	75

Armed Robbery	
OXYCODONE 15MG* IMMEDIATE REL TABS	114
OXYCODONE/ACETAMINOPHEN 10-325MG TB	98
OXYCODONE 30MG IMMEDIATE REL TABS	86
OXYCODONE 10MG IMMEDIATE REL TABS	75
OXYCODONE 5MG IMMEDIATE REL TABS	62

Night Break-in	
HYDROCODONE/ACETAMINOPHEN 10-325 T	69
HYDROCODONE/ACETAMINOPHEN 7.5-325 T	58
OXYCODONE/ACETAMINOPHEN 5-325MG TAB	56
OXYCODONE/ACETAMINOPHEN 10-325MG TB	53
OXYCODONE/ACETAMINOPHEN 7.5-325MG TB	50
HYDROCODONE/ACETAMINOPHEN 5-325 TB	50

Dates Inclusive FY14-15 (9/1/2013-8/31/2015)





# DEA 106 - Incidents Reported On Time

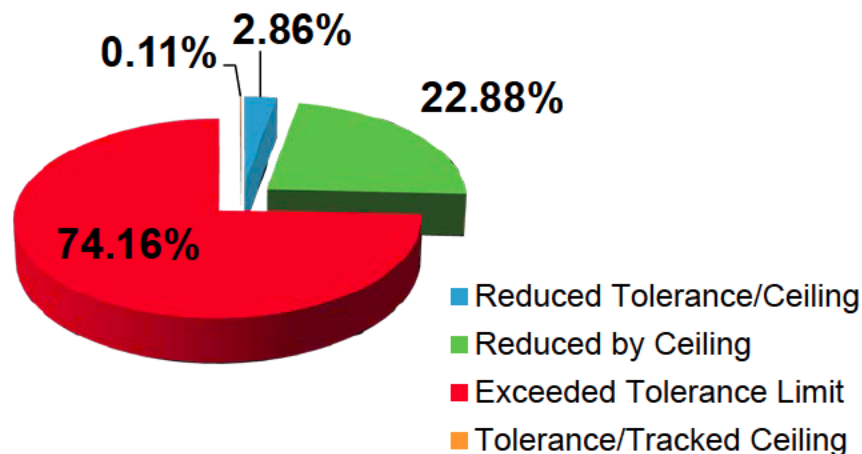
Loss Type	Over Due	Report on Time
<b>Operation 1 - Western</b>	<b>11.54%</b>	<b>87.18%</b>
Armed Robbery	2.65%	97.35%
Customer Theft	0.00%	100.00%
Employee Pilferage	22.34%	74.47%
Loss in Transit	13.64%	86.36%
Night Break-in	13.51%	86.49%
Other	13.40%	84.54%
<b>Operation 2 - Southern</b>	<b>10.56%</b>	<b>89.11%</b>
Armed Robbery	4.88%	95.12%
Customer Theft	0.00%	100.00%
Employee Pilferage	16.67%	82.50%
Loss in Transit	4.84%	95.16%
Night Break-in	6.67%	93.33%
Other	12.50%	87.50%
<b>Operation 3 - Eastern</b>	<b>3.20%</b>	<b>96.00%</b>
Armed Robbery	0.00%	97.62%
Customer Theft	0.00%	100.00%
Employee Pilferage	6.85%	93.15%
Loss in Transit	0.00%	100.00%
Night Break-in	0.00%	100.00%
Other	2.02%	96.97%
<b>Grand Total</b>	<b>8.33%</b>	<b>90.82%</b>



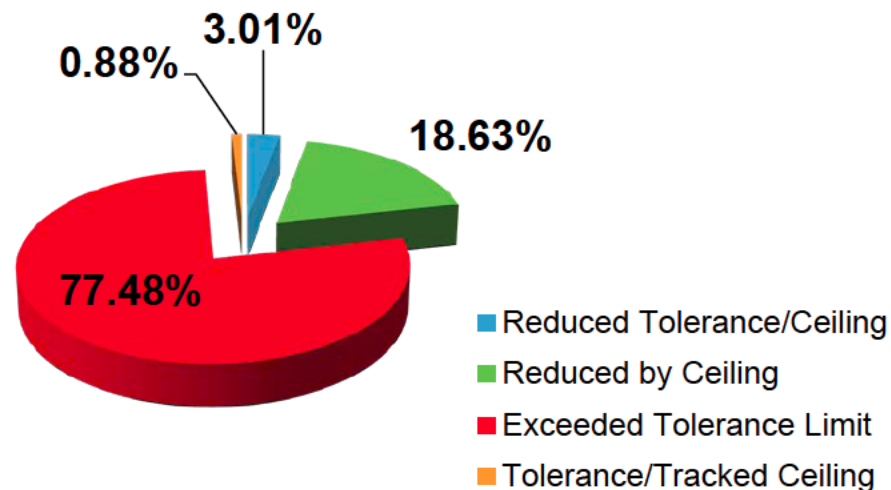
# Flagged Orders

# Flagged Orders

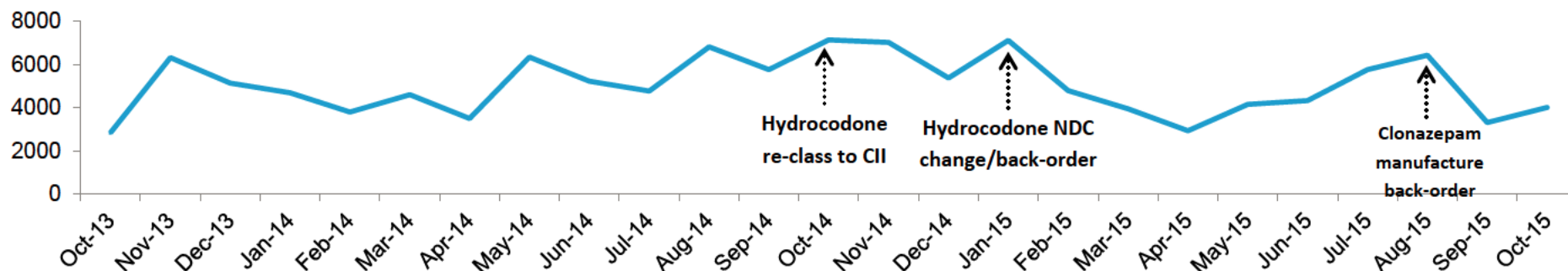
**FISCAL 2014**



**FISCAL 2015**



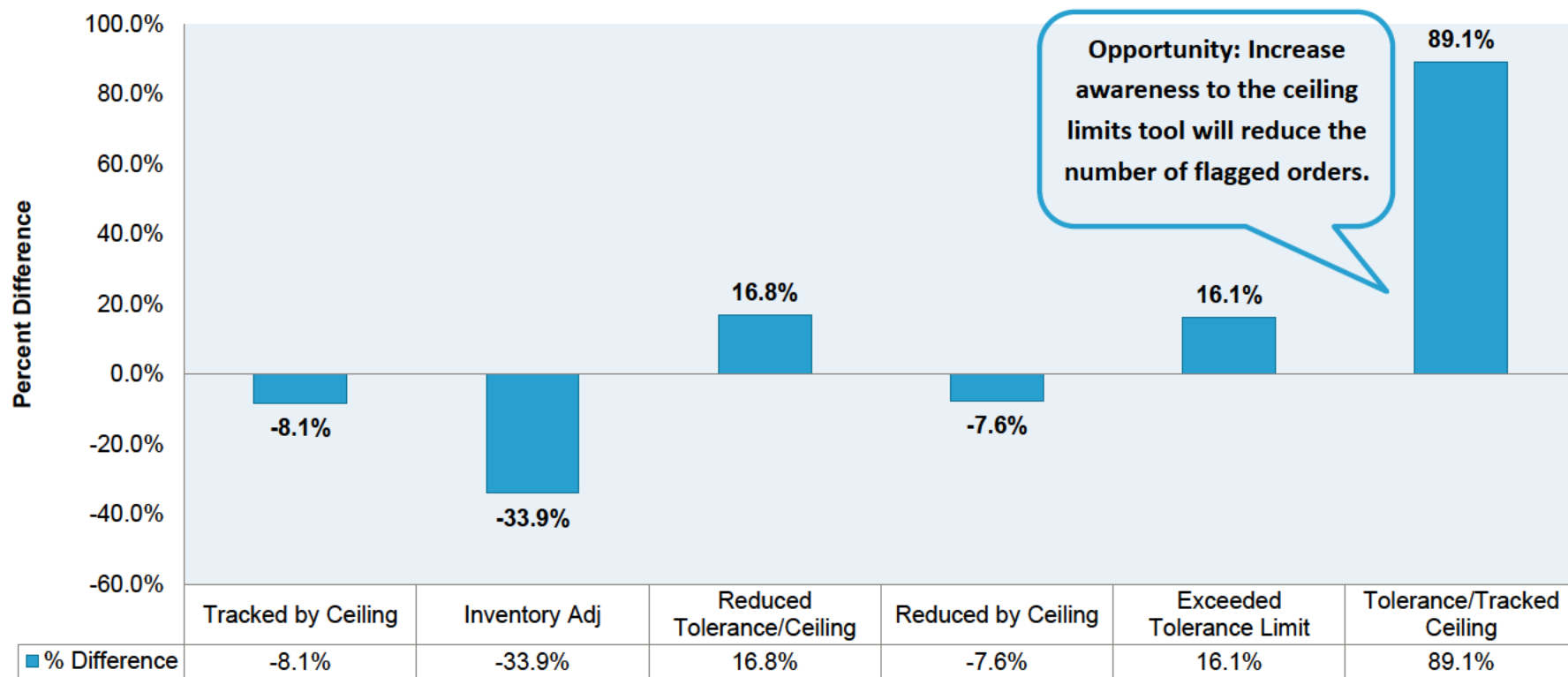
**Orders Flagged and Cancelled Chain-wide**



# Flagged Orders

If stores check the Ceiling Limits tool before ordering they can avoid having orders being flagged and reduced due to tolerance or ceiling limits.

## Flagged Orders Year over Year



# Flagged Items

In 2015, the most frequently flagged items were fentanyl, this is due to the default tolerance being 2 packages for items with no history of movement. A SIMS enhancement to increase the lowest default tolerance would prevent many of these flagged orders.

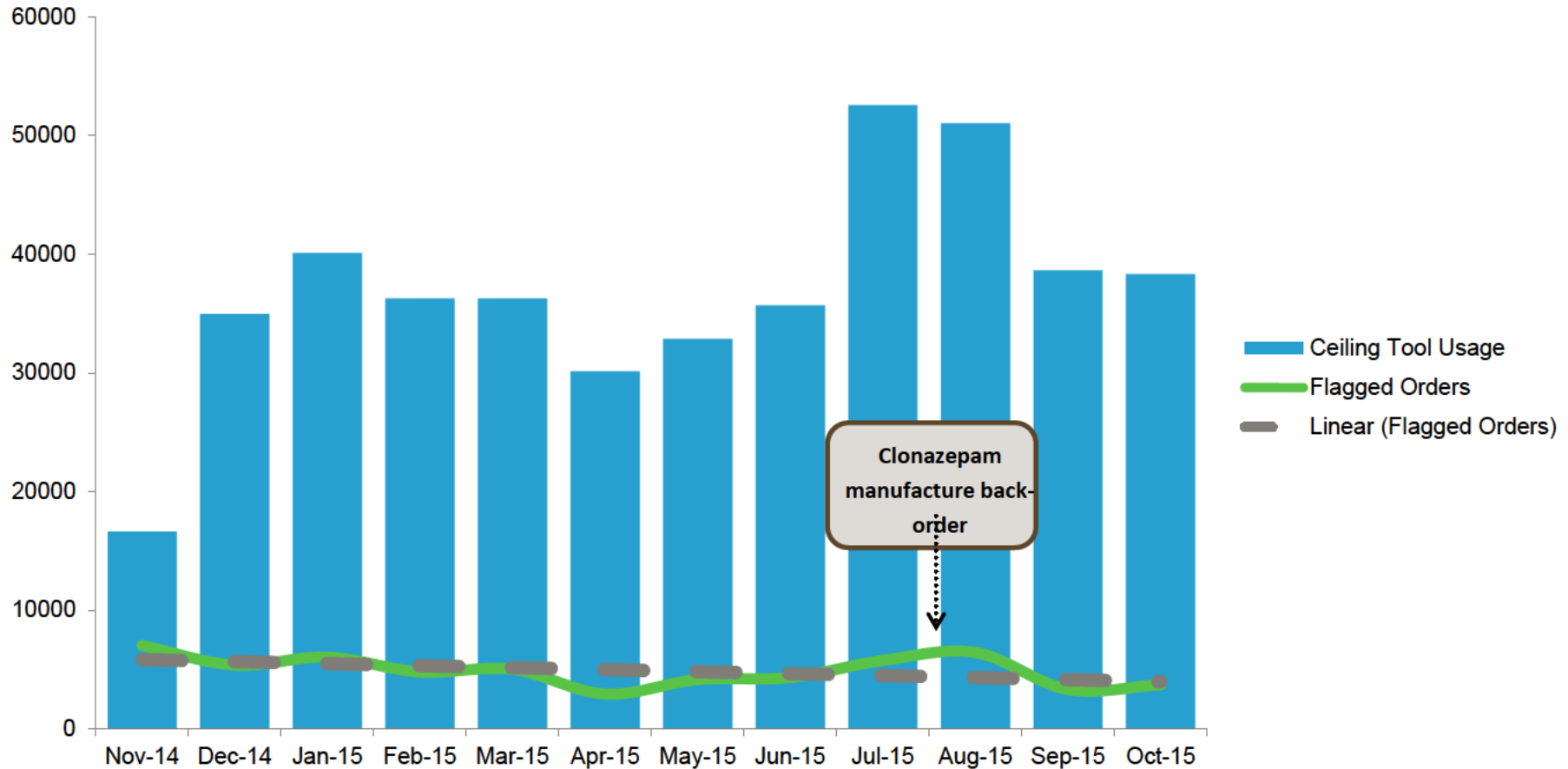
Fiscal Year 2014, Top 20 Items Flagged		
Product Name		Total Count
FENTANYL 50MCG/HR TS (MYL) 5		1,699
TESTOSTERONE CYP 200MG/ML (PAD)+1ML		545
FENTANYL 100MCG/HR TS (WAT) + 5		511
SUBOXONE 8-2MG SL FILM +30		498
FENTANYL 75MCG/HR TS (WAT) + 5		481
WAL-FEX D 24HR AL TAB10S 240MG/DS		465
WAL-FEX D 24HR ALRGY 240MG/DS15S		459
FENTANYL 100MCG/HR TS (MYL) 5		421
LYRICA 75MG CAP + 90		413
FENTANYL 12MCG/HR TS (MYL) + 5		360
LYRICA 100MG CAP + 90		321
FENTANYL 75MCG/HR TS (MYL) 5		319
LYRICA 150MG CAP + 90		304
FENTANYL 25MCG/HR TS (WAT) + 5		299
LYRICA 50MG CAP + 90		294
CLARITIN D 12HR TAB 10S 120MG/DS		292
FENTANYL 25MCG/HR TS (MYL) 5		290
WAL-ITIN D 12HR TAB 10S 120MG/DS		281
FENTANYL 12MCG/HR TS (SAN) 5		274
ALLEGRA D 24HR TAB 10S 240MG/DS		270

Fiscal Year 2015, Top 20 Items Flagged		
Product Name		Total Count
FENTANYL 100MCG/HR TS (WAT) + 5		1,124
SUBOXONE 8-2MG SL FILM +30		1,051
TESTOSTERONE CYP 200MG/ML (PAD)+1ML		897
ACETAMIN-COD 300-30 TAB (TEV) 100		882
FENTANYL 75MCG/HR TS (WAT) + 5		836
FENTANYL 50MCG/HR TS (MYL) 5		795
CLONAZEPAM 0.5MG TAB (PPC) 100		736
CLONAZEPAM 0.5MG TAB (TV) 100		726
CLONAZEPAM 0.5MG TABS (ACC) 100		688
WALG AL/SIN D D/T CAP 24S 60MG/DS		683
LYRICA 75MG CAP + 90		682
PROMETH-COD 6.25-10 SYR(HIT)+16OZ		682
FENTANYL 12MCG/HR TS (SAN) 5		672
FENTANYL 25MCG/HR TS (MYL) 5		669
CLONAZEPAM 0.5MG TAB (MYL) 100		625
GUAIAUSSIN AC SYRP (HT) +473ML		562
FENTANYL 50MCG/HR TS (WAT) + 5		559
FENTANYL 100MCG/HR TS (MYL) 5		559
LYRICA 100MG CAP + 90		541
FENTANYL 12MCG/HR TS (MYL) + 5		525



# Flagged Orders vs. Ceiling Tool (last 12 months)

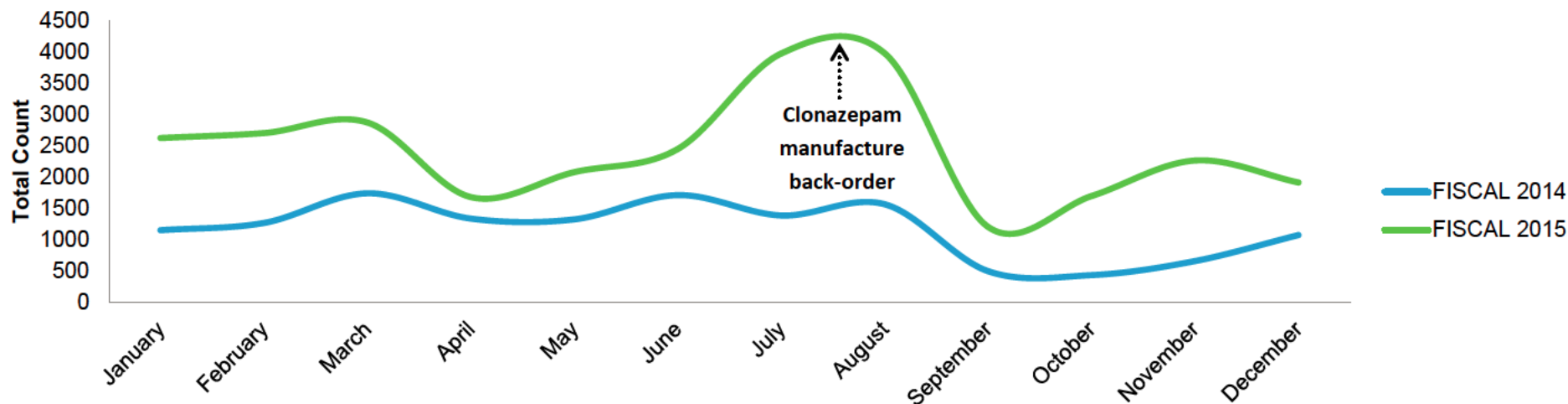
## Flagged Orders Compared to Ceiling Limit Tool Usage



# CSO Override Forms

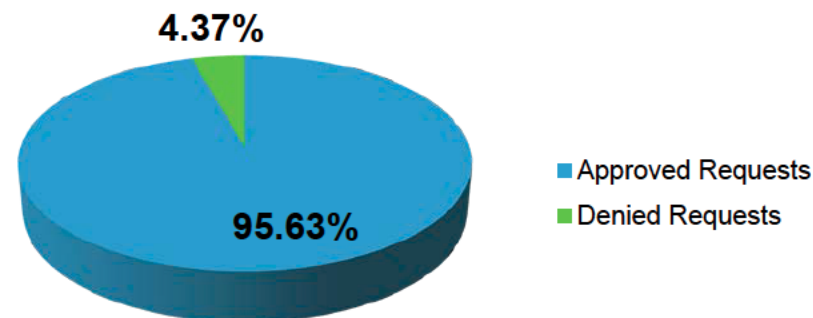
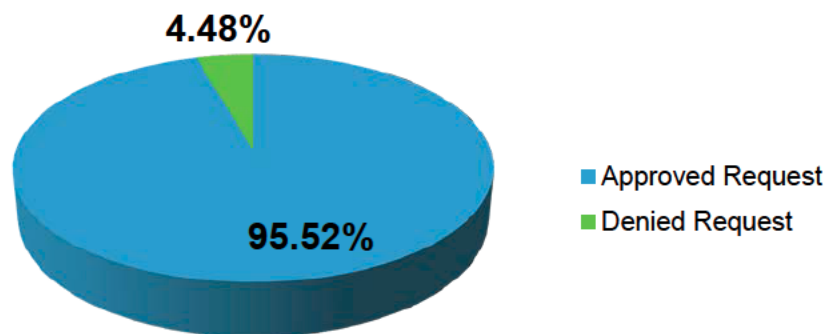
# Controlled Substance Override Forms

## CSO Overrides Submitted



Fiscal 2014

Fiscal 2015



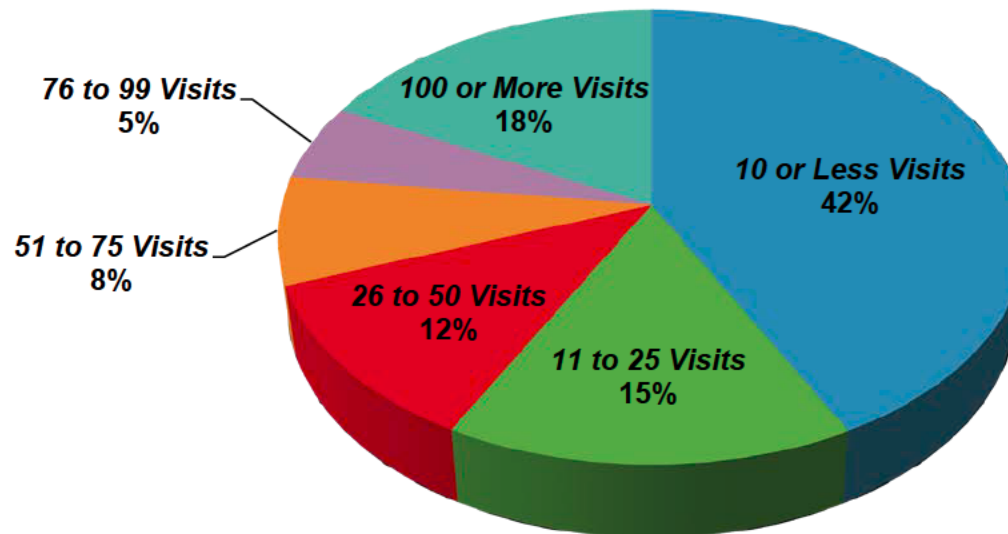
*Keep in mind, ABC still has the right to refuse to fill an order although Rx Integrity has approved. Stores should monitor their ABC Invoices to understand why an item would be omitted from the order.*





# Ceiling Limits Tool Usage

Store visits to the Ceiling Limits Tool for Fiscal 2015



- 75% of the chain has logged into the ceiling limits tool at least once FY15.
- 42% of all stores who've logged into the tool, used it 10 or less times.
- Increase awareness around the importance of using the ceiling limits tool in the ordering process will help reduce flagged orders and mitigate delay of product delivery.



# Prescriber Tickets

Management of prescriber profiles and resolution of data issues with regards to prescribers ability to write for controlled substances.

# Prescriber Tickets

Master Prescriber started July 2014

Total of 17,406 Tickets opened from start to end of FY15

4,452 tickets are RX Integrity (25%)

On average, 306 new tickets opened each month for FY15

505 instances where there was more than 1 ticket per prescriber

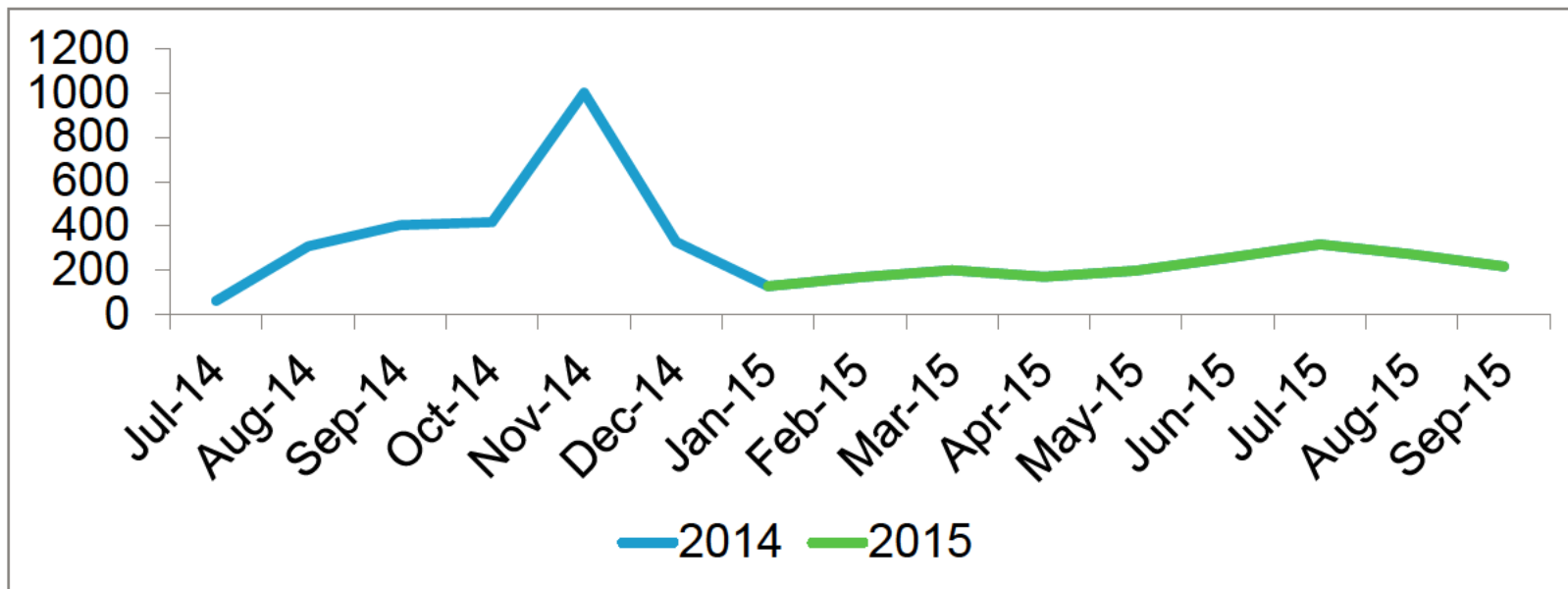
Up to 9 tickets were opened for the same prescriber

Top 5 States with Prescriber Tickets

Illinois, California, Florida, New York, and Texas



# Opened RX Integrity Tickets Per Month

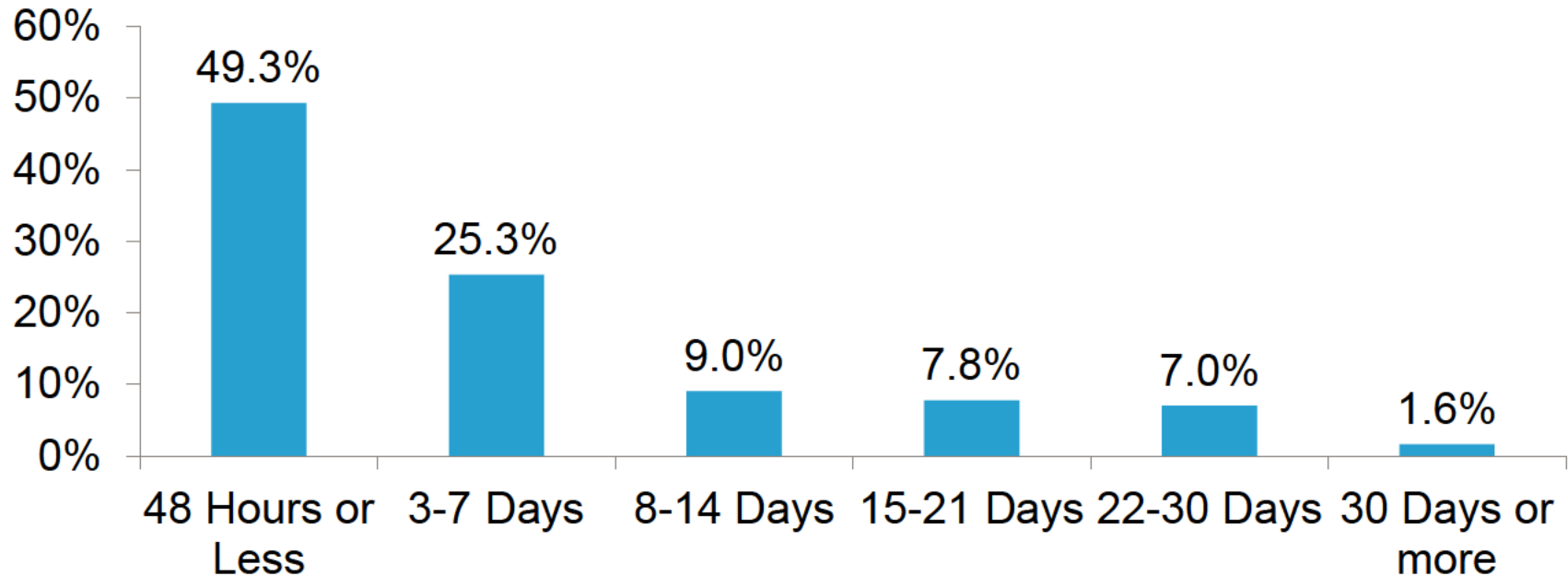


- **November 2014 spike caused by Master Prescriber blocking prescriber profiles with outdated data from HMS and One Walgreens**
- **At that time, more stores were continually rolled out on master prescriber. Slow One Walgreens data loads prevented updated prescriber information from pushed down to store systems, which resulted in additional tickets being opened.**
- **The tickets went down as HMS and One Walgreens caught up and Master Prescriber blocking logic was turned off.**



# Turn around time for Tickets

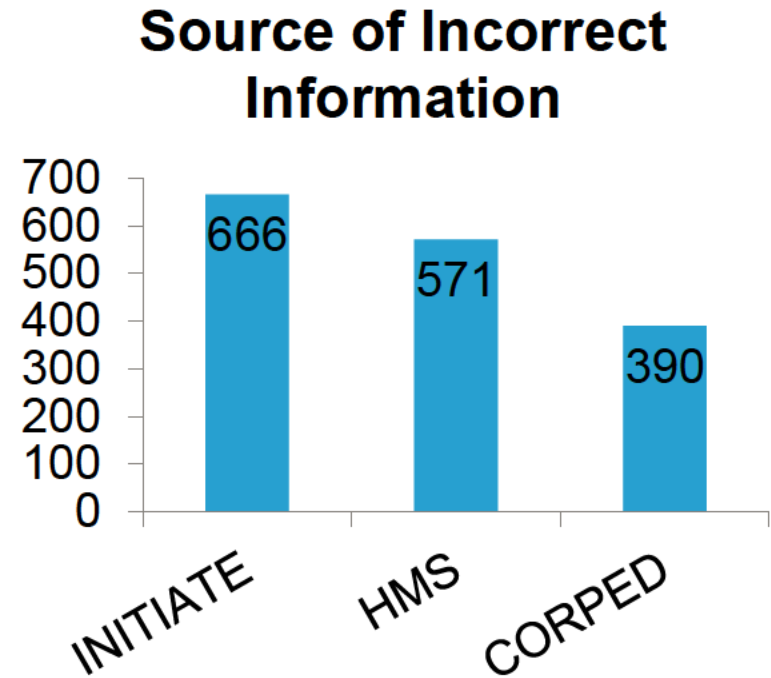
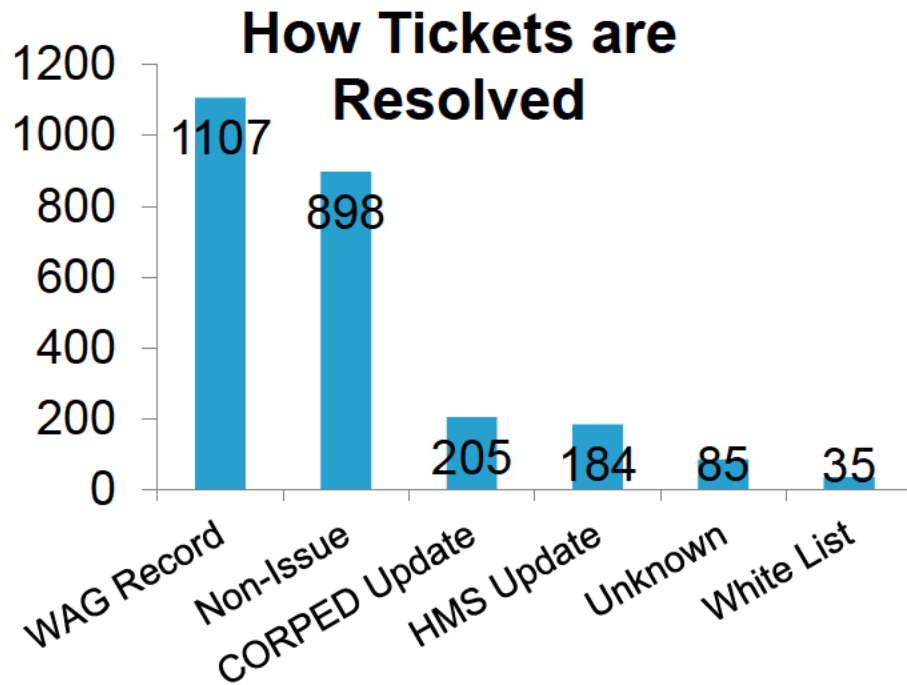
## Closed Tickets



- **Almost 50% of tickets were resolved within 48 hours**
- **75% of tickets closed within 7 days.**
- **2% of tickets were reopened by the stores after closed by RX Integrity.**



## Ticket Resolutions – Started December 2014



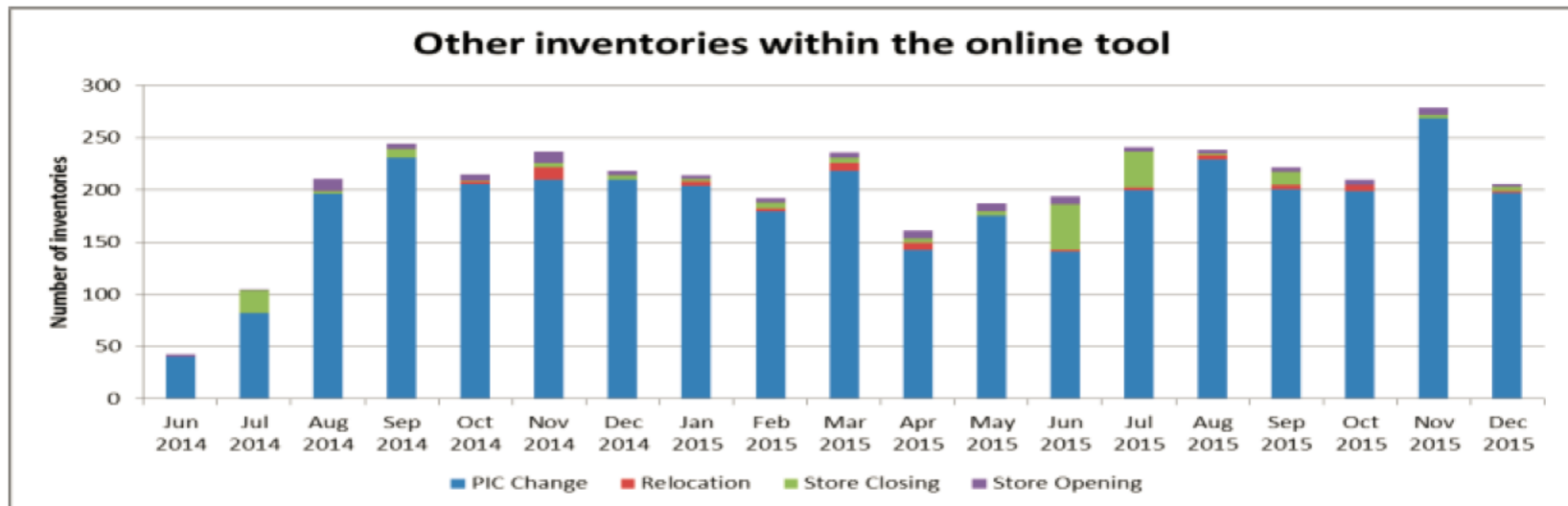
- **9.5% of Tickets** required the NPI to be updated
- **47.6% of tickets** required the DEA to be updated
- **Non-Issue** means that by the time the ticket was assigned the data had been resolved by the new HMS data load.



# **Controlled Substance Annual Inventories**

# Pharmacy Annual Controlled Substance Inventories

- Annual Inventory (June 9<sup>th</sup> each year)
  - Prior to June 2014, the Annual Inventory was a manual (i.e. paper) process. Management had very little insight into how many stores were completing it or when it was being completed.
  - Starting in June 2014, the Annual Inventory has been completed electronically using an online tool. Management now has immediate insight into how many stores are completing it and when they are being completed. The 2014 and 2015 Annual Inventories were completed with a 99% completion rate by midnight on June 10<sup>th</sup>.
- Other inventories were added to the online tool since it was developed for the Annual Inventory.
- PIC Change inventories account for the majority of online inventories (average of 186 / month).

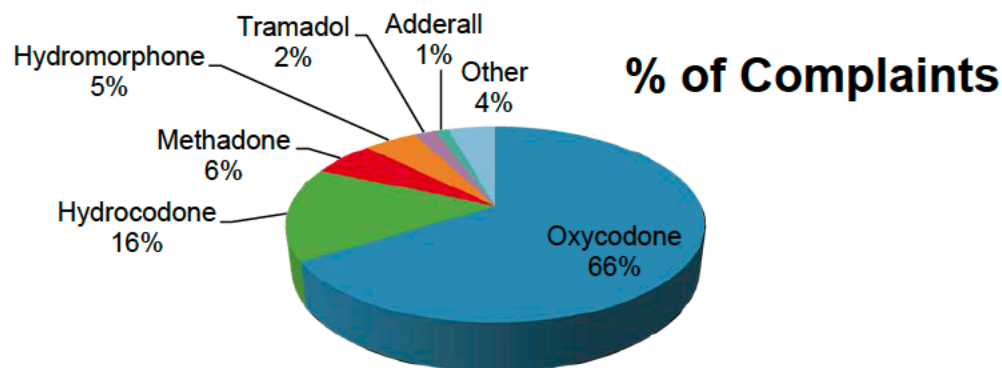




# GFD Complaints

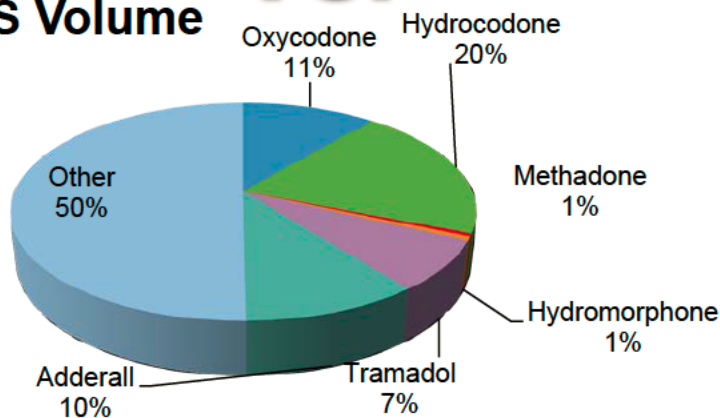
Analysis of frequency and type of patient complaints received related to GFD.

# GFD Complaints



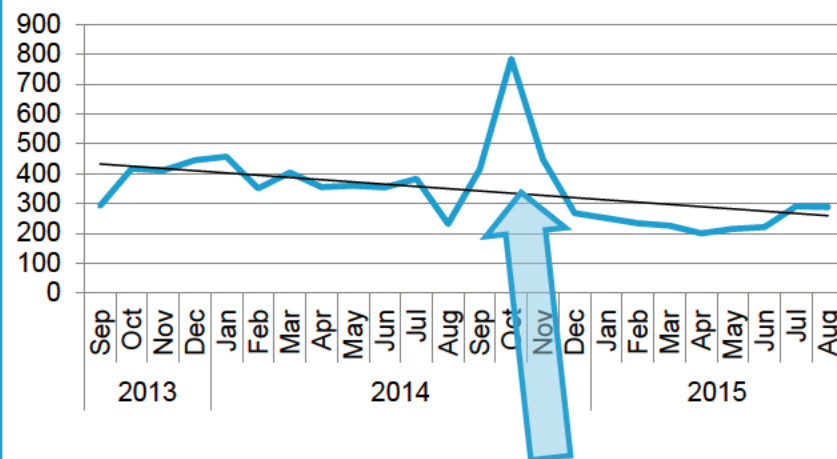
VS.

## % of CS Volume



**Oxycodone makes up 2 out of every 3 of Complaints, but only 11% of Controlled Substance Volume**

## Complaints by Month



**Jump Caused By Hydrocodone Complaints During Transition to C2.**

Hydrocodone only

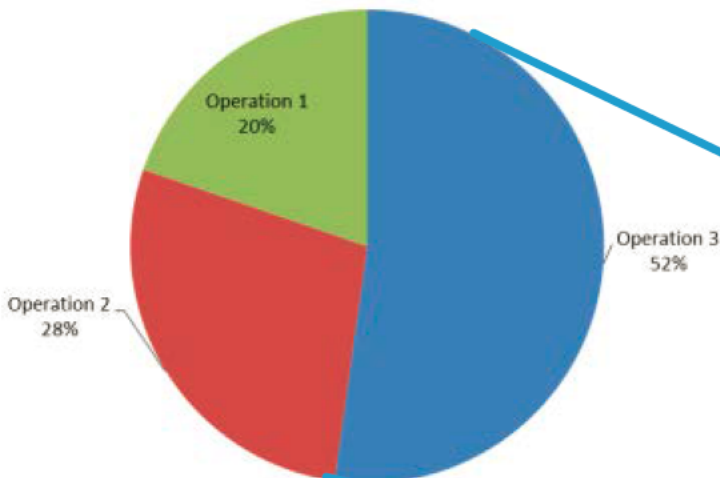


# GFD Complaints - Non Dispensing Pharmacists

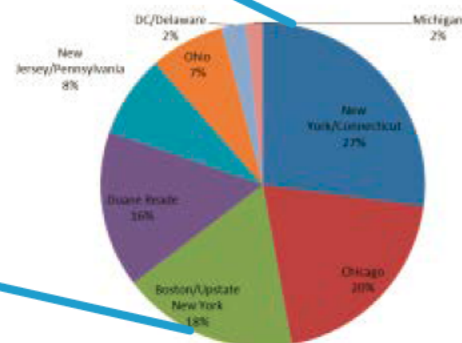
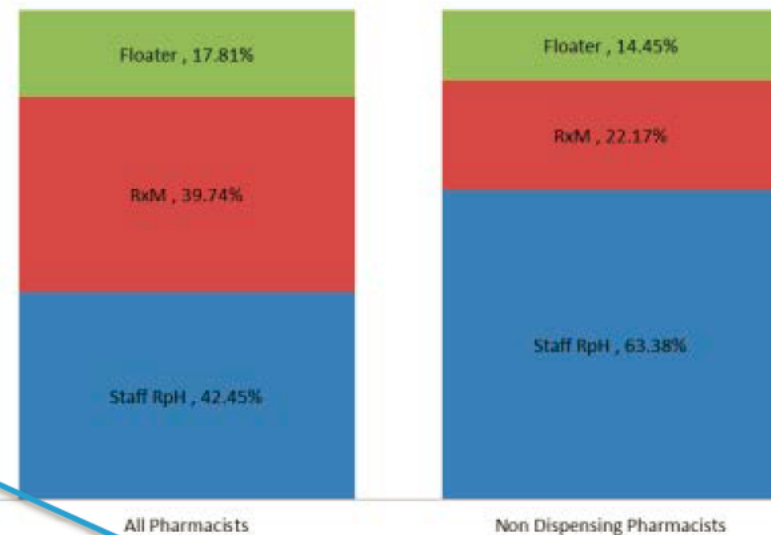
**Non Dispensing RPhs consist of RPh that dispense significantly less controlled substances compared to their peers. This takes into account volume and other factors to get a picture of pharmacists who are choosing to not dispense controlled substances rather than follow GFD effectively.**

## Breakdown: Non-Dispensing RPh Top Areas

**-Eastern Operation has the largest percentage, as a result of 2 large regions; New York and Chicago**



## Non-Dispensing RPh Distribution vs. All RPh



**Comparison: % of RPh in each category in the chain, vs the % of RPh in each category who are classified as non-dispensing RPh .**

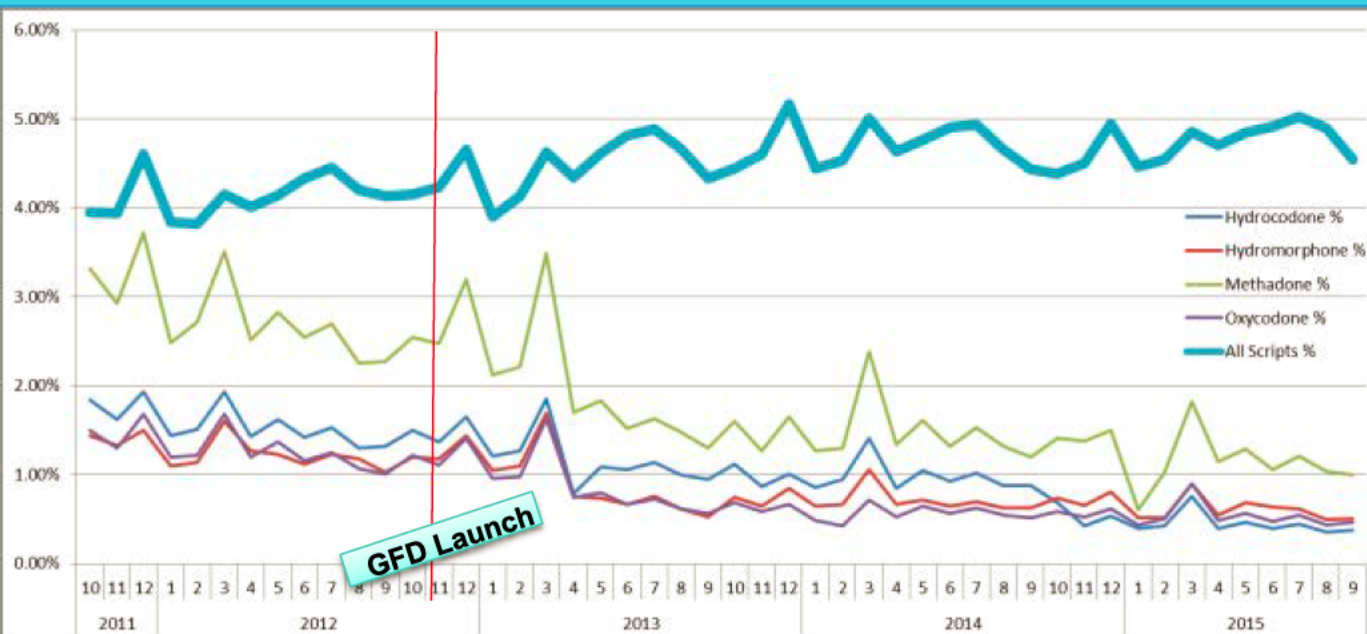
**-A much higher rate of Staff RPh are non-dispensing RPh than other categories**



# GFD Trending

Analysis of various metrics effected by the roll-out of GFD policy including early refills, cash only prescriptions and high quantity target drug prescriptions.

# GFD-Early Refills

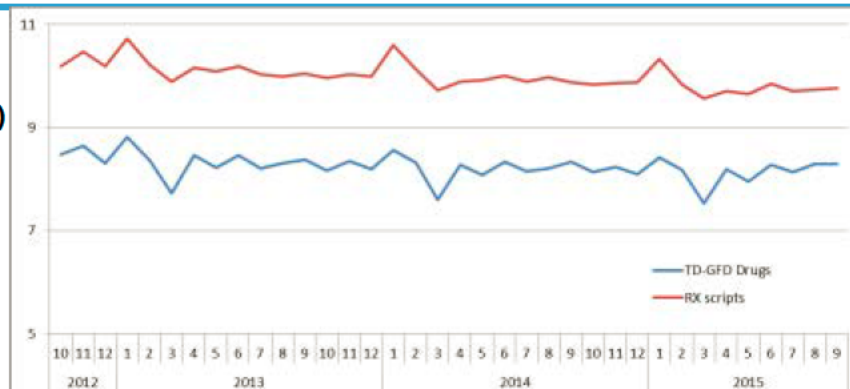


**Early Refill % for TD-GFD Drugs are down, while the trend is up for all other drugs**

- An Early Refill is a script filled 5 or more days before it is due
- Pharmacists are doing a good job keeping early refills down for addictive substances such as TD-GFD drugs
- Begin to Monitor Benzodiazepine and Sedatives, which show a higher than normal rate of Early Refills.

**Metric:** Average Length of Early Refill. I.E. How early is it (in days)

- Controlled drugs are lower throughout than non-controlled.
- Steady decline overall

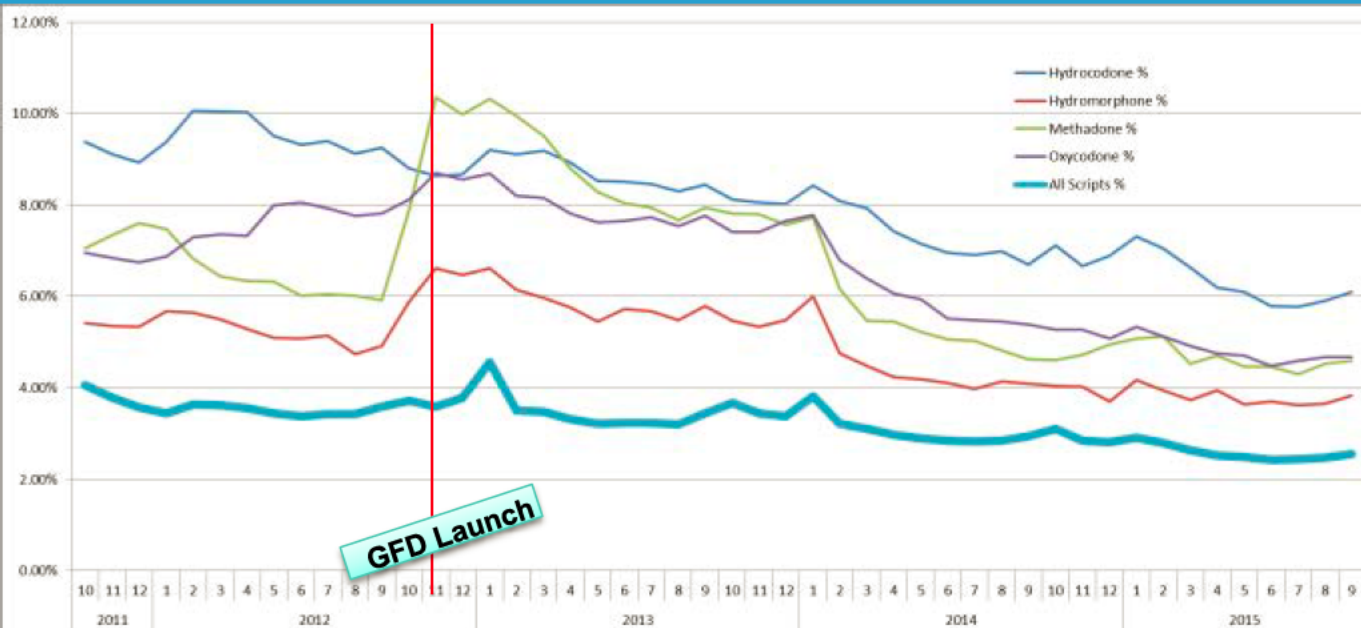


## Top Early Refill % Drugs(LY)

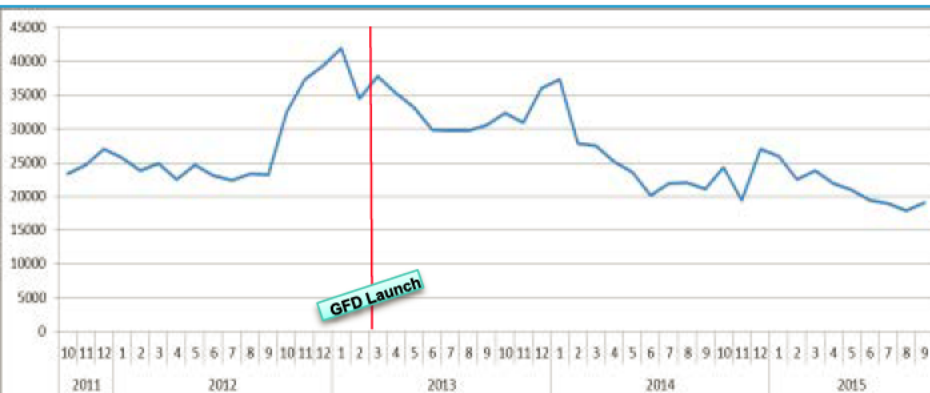
Drug Class	E.R. %
Sedative	4.48%
Benzodiazepine Sedative	4.28%
Barbituate	3.98%
Pregabalin	3.60%
Stimulants	3.36%
Buprenorphine Patch	3.33%
Benzodiazepine	3.01%
Benzodiazepine Anxiety	2.65%
Amphetamine	1.94%
Methadone	1.21%
Hydromorphone	0.64%
Oxycodone	0.52%
Hydrocodone	0.48%



# GFD - Cash Percentage



**Steady decrease in Cash percentage since the launch of GFD.**



**Metric:** TD-GFD cash scripts picked up on the same day as a non-control under a Third Party Insurance

-Spiked in late 2012, and there has been a steady decrease from then on.

## Top Cash%

Drug Class	Cash %
Phentermine	45.41%
Codeine Liquid	22.94%
Hydrocodone Liquid	12.19%
Carisoprodol	9.35%
Codeine Solid	8.46%
Buprenorphine	8.11%
Hydrocodone	6.25%
Oxycodone	4.93%
Methadone	4.65%
Hydromorphone	3.82%

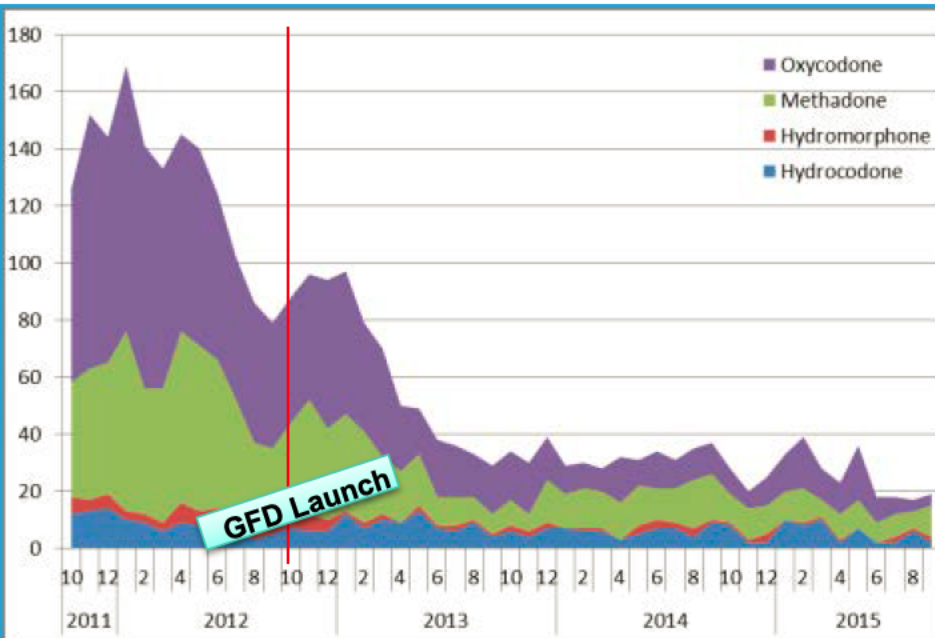
- Cash percentage has dropped overall since GFD began
- Begin to Monitor Codeines and Hydrocodone Liquid for Cash Percentages
- Educate Pharmacists on filling Cash TD-GFD Drugs at the same time as Third Party non-controls.





# GFD- New Patient High Quantity/Multiple Prescriber

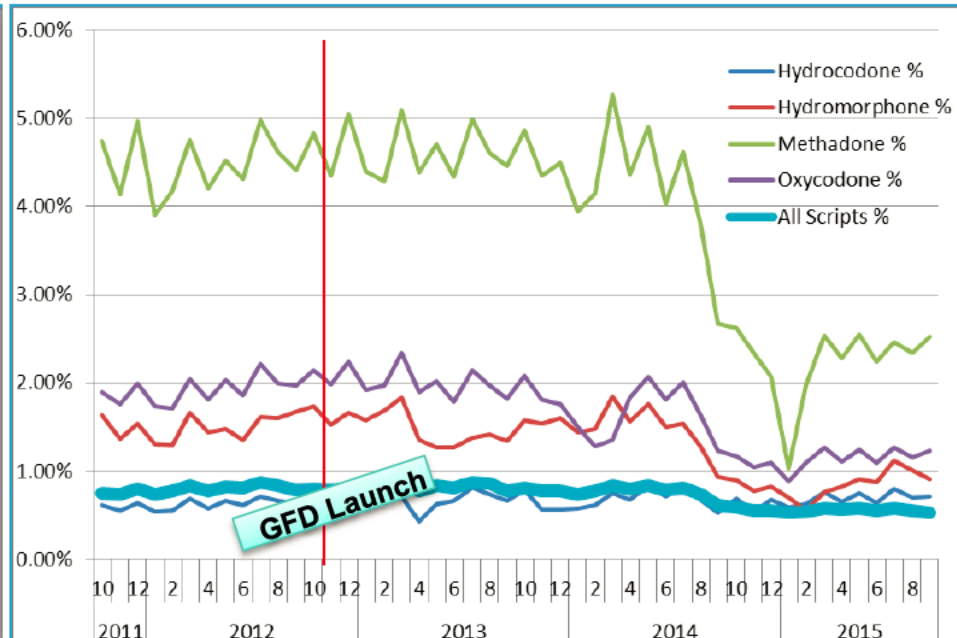
**Patient has received this prescription from Walgreens before.**



**High Dose Scripts (>360) for patients new to Walgreens**

- Huge drop over the previous 4 years
- Hydromorphone is almost non-existent

**This prescription is from the same prescriber for the same medication as the previous fill**



**Percent of Scripts that are for the same medication, but a different prescriber**

- Methadone % dropped in late 2014
- All TD-GFD drugs are higher than average

